annual data 1986

COPPER · BRASS · BRONZE

copper supply & consumption

1965-1985

COPPER DEVELOPMENT ASSOCIATION INC.

Preface

Statistical data on the supply and consumption of copper and copper alloys in the United States are available from many governmental and private sources. In this report original data from these sources are brought together and rationalized by CDA and American Bureau of Metal Statistics Inc. (ABMS) to provide a set of data on U.S. copper supply and consumption that is both consistent and accurate in all aspects from mine to end-use market.

The main sources of information assembled here are the Bureau of Mines in the U.S. Department of the Interior, the Bureau of the Census in the U.S. Department of Commerce, and Copper Development Association Inc. Where data from different sources are conflicting, and where original data appear to be in error, the best judgment has been applied. General sources are shown in the tables throughout the report. Those interested to know the specific sources of any of the data should contact CDA.

The statistics are arranged in a logical sequence to trace the flow of copper in the U.S. economy from mining and scrap collection through smelting, refining and ingot making to the wire rod and wire mills, brass mills, and foundries and then on to the final end-use markets. This flow is shown schematically on pages 4–5. On this schematic flowsheet the major statistics of copper supply and consumption in the United States for 1985 appear. Along with each major statistic on the chart, a reference is shown. This reference identifies the table in the report where details on that item, from 1965 through 1985, will be found. Most data for 1985 are preliminary.

There are four major tables in the report. *Table 1* covers the supply of primary copper. *Table 2* presents data on the supply of copper from secondary sources. In *Table 3*, statistics on the consumption of primary and secondary metals by mills, foundries and other industries are summarized. These three tables are provided by ABMS. Finally, *Table 4* details the supply of mill, foundry and powder products and their consumption in the five end-use market areas. In each of these tables, additions to the flow (such as net imports) are indicated as positive numbers, while subtractions from the flow (such as melting losses or net additions to stocks) are shown as negative numbers.

The arrangement of the data in the report can be illustrated with an example. Consider *Mine Production*, the upper left-hand box in the flowsheet on page 4. As shown in the box, mine production of copper in the United States totaled 1,203.9 thousand short tons in 1985. Beneath this figure a number appears referring to *Table 1, Item 1,* abbreviated *1(1)*. This means that in *Table 1,* on Line (1), mine production is shown for the full period 1965 through 1985. In *Table 1,* on Line (1), a further reference will be found after the item heading *Mine Production*, directing the reader to page 7. This reference means that further details on mine production appear on page 7. In fact, on page 7, a table entitled *Table 1, Item 1* presents the data on mine production by state for 1965 through 1985. In this way all the data on supply and consumption appear in logical sequence proceeding through the report, eliminating the need for explanatory text.

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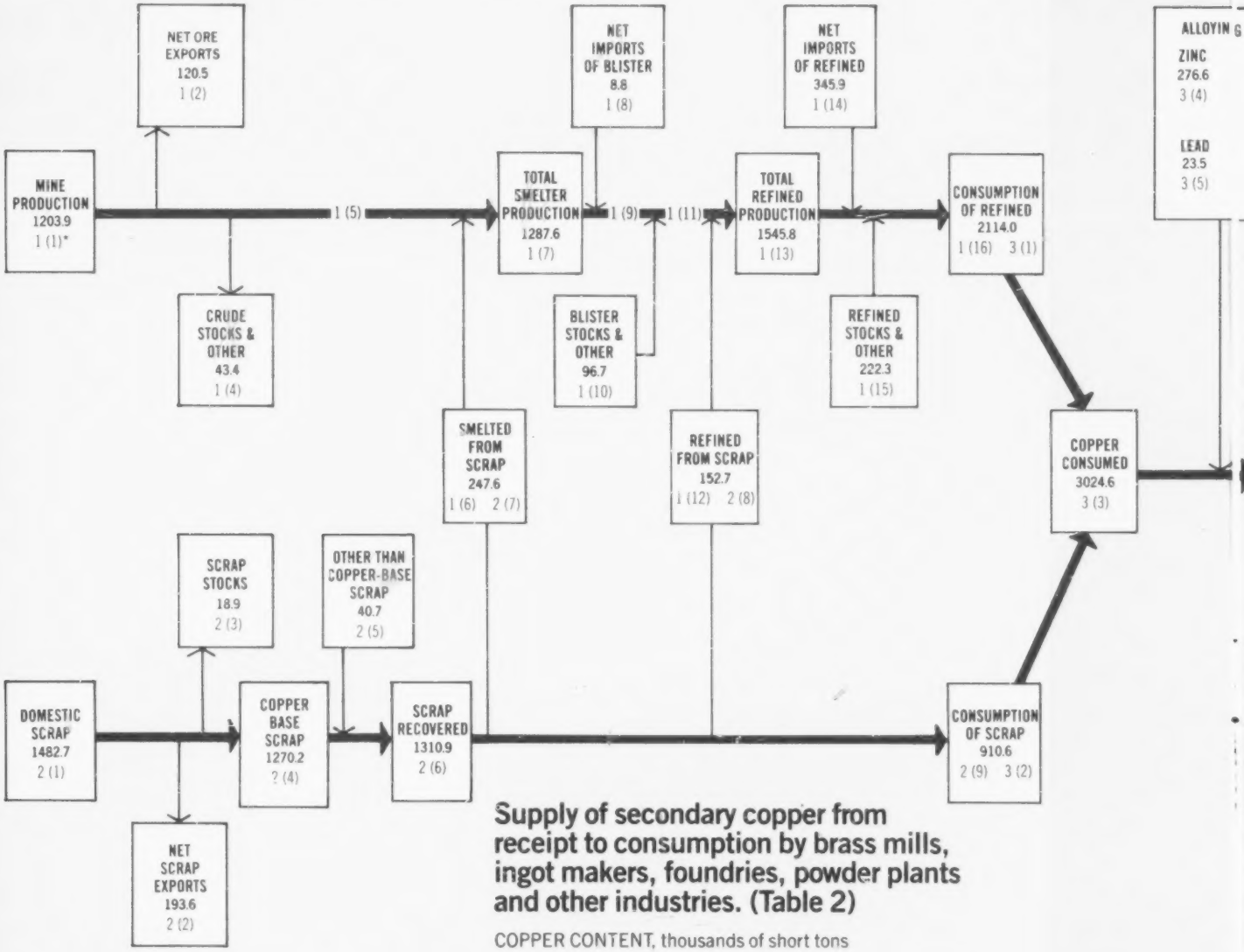
Copper supply and consumption in the United States 1985

Supply of primary copper from mine to consumption by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries. (Table 1)

COPPER CONTENT, thousands of short tons


NET ORE EXPORTS 120.5 1 (2)
NET IMPORTS OF BLISTER 8.8 1 (8)
NET IMPORTS OF REFINED 345.9 1 (14)
ALLOYIN G
ZINC 276.6 3 (4)
LEAD 23.5 3 (5)
MINE PRODUCTION 1203.9 1 (1)*
1 (5)
TOTAL SMELTER PRODUCTION 1287.6 1 (7)
1 (9)
1 (11)
TOTAL REFINED PRODUCTION 1545.8 1 (13)
CONSUMPTION OF REFINED 2114.0 1 (16) 3 (1)
CRUDE STOCKS & OTHER 43.4 1 (4)
BLISTER STOCKS & OTHER 96.7 1 (10)
REFINED STOCKS & OTHER 222.3 1 (15)
SMELTED FROM SCRAP 247.6 1 (6) 2 (7)
REFINED FROM SCRAP 152.7 1 (12) 2 (8)
COPPER CONSUMED 3024.6 3 (3)
SCRAP STOCKS 18.9 2 (3)
OTHER THAN COPPER-BASE SCRAP 40.7 2 (5)
DOMESTIC SCRAP 1482.7 2 (1)
COPPER BASE SCRAP 1270.2 2 (4)
SCRAP RECOVERED 1310.9 2 (6)
CONSUMPTION OF SCRAP 910.6 2 (9) 3 (2)
NET SCRAP EXPORTS 193.6 2 (2)

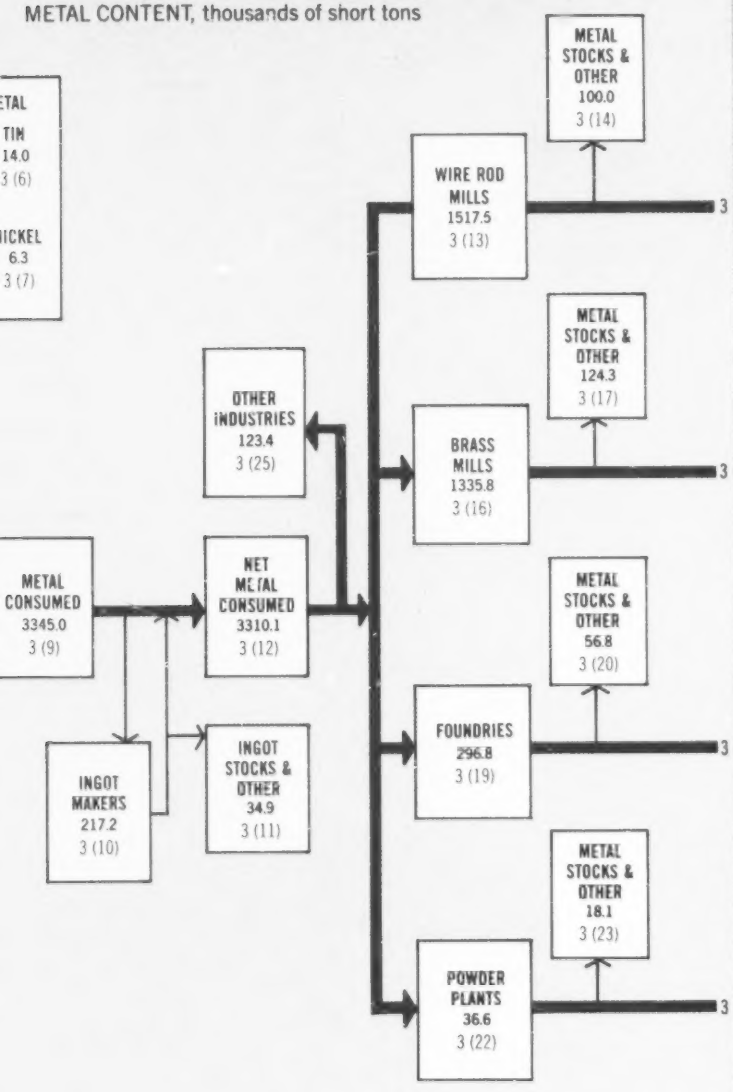
Supply of secondary copper from receipt to consumption by brass mills, ingot makers, foundries, powder plants and other industries. (Table 2)

COPPER CONTENT, thousands of short tons

*1 (1) Refers to table and item in report where data for 1965 through 1985 appear.

Consumption of metals by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries. (Table 3)

METAL CONTENT, thousands of short tons



Supply of wire mill, brass mill, foundry and powder products and their consumption in the end-use markets. (Table 4)

METAL CONTENT, millions of pounds

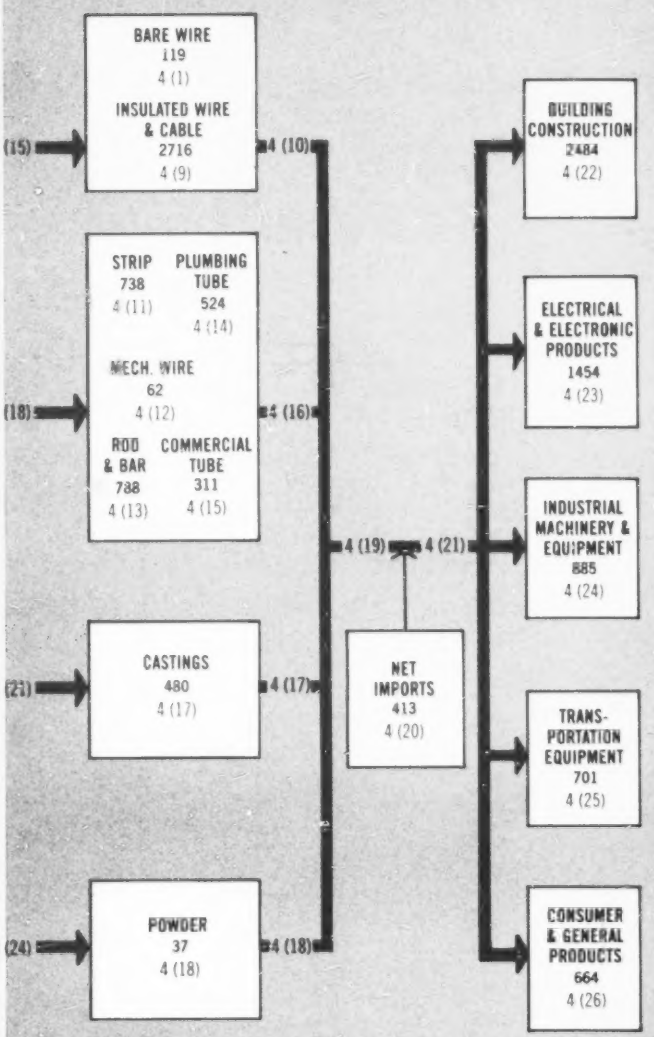


Table 1

Supply of primary copper from mine to consumption by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
(1) Mine Production (page 7)	1,351.7	1,429.2	954.1	1,204.6	1,544.6	1,719.7	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,594.6	1,301.9	1,695.5	1,264.3	1,144.3	1,202.9r	1,203.9
(2) Net Ore Imports (page 8)	26.3	40.5	−5.7	−37.4	37.9	−27.7	23.1	35.4	19.4	36.7	65.7	74.8	42.2	13.9	−23.9	−101.2	−130.2	−107.1	55.7	−50.2r	−120.5
(3) Total Crude Primary	1,378.0	1,469.7	948.4	1,167.2	1,582.5	1,692.0	1,545.3	1,700.2	1,737.3	1,633.7	1,479.1	1,680.4	1,546.2	1,510.4	1,570.7	1,200.7	1,565.3	1,157.2	1,200.0	1,152.7r	1,083.4
(4) Crude Stocks and Other	−11.1	−80.0	−86.1	99.3	3.0	−50.7	−45.3	−9.8	6.7	−63.8	−32.0	−145.7	−111.0	−90.2	−98.4	−89.2	−113.8	−81.7	−177.3	−34.9r	−43.4
(5) Smelter Production From Primary	1,366.9	1,389.7	862.3	1,266.5	1,585.5	1,641.3	1,500.0	1,690.4	1,744.0	1,569.9	1,447.1	1,534.7	1,455.2	1,420.2	1,472.3	1,111.5	1,451.5	1,075.5	1,022.7	1,117.8	1,040.0
(6) Smelter Production From Scrap	93.9	114.6	70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5	67.1	49.7	65.3	136.5r	247.6
(7) Total Smelter Production (page 8)	1,460.8	1,504.3	933.0	1,351.3	1,662.8	1,720.2	1,566.3	1,759.4	1,821.8	1,649.4	1,496.5	1,585.7	1,484.6	1,480.0	1,538.7	1,161.0	1,518.6	1,125.2	1,088.0	1,254.3r	1,287.6
(8) Net Imports of Blister (page 8)	327.7	349.2	248.3	255.0	233.6	216.6	128.0	148.9	146.6	205.1	87.4	41.1	28.3	70.0	66.9	47.6	71.1	111.8	79.4	57.1	8.8
(9) Total Blister	1,788.5	1,853.5	1,181.3	1,606.3	1,896.4	1,936.8	1,694.3	1,908.3	1,968.4	1,854.5	1,583.9	1,626.8	1,512.9	1,550.0	1,605.6	1,208.6	1,589.7	1,237.0	1,167.4	1,311.4r	1,296.4
(10) Blister Stocks and Other (page 9)	17.2	−27.9	22.4	−84.1	−76.3	−92.8	−36.2	33.9	−22.1	−120.3	−91.1	−36.5	32.7	107.1	131.2	175.6	179.4	165.3	200.9	148.1r	96.7
(11) Refined Production from Blister	1,805.7	1,825.6	1,203.7	1,522.2	1,820.1	1,844.0	1,658.1	1,942.2	1,946.3	1,734.2	1,492.8	1,590.3	1,545.6	1,657.1	1,736.8	1,384.2	1,769.1	1,402.3	1,368.3	1,459.5r	1,393.1
(12) Refined Production from Scrap	335.1	357.7	322.9	316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	362.3	441.2	474.3	419.4	452.7	374.9	204.3r	152.7
(13) Total Refined Production (page 9)	2,140.8	2,183.3	1,526.6	1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,019.4	2,178.0	1,858.5	2,188.5	1,855.0	1,743.2	1,663.8r	1,545.8
(14) Net Imports of Refined (page 9)	−193.5	−117.0	168.7	149.3	−83.8	−89.9	−23.7	9.7	8.8	177.2	−26.4	266.1	327.8	342.7	147.1	481.1	325.2	274.2	435.2	450.4	345.9
(15) Refined Stocks and Other (page 10)	85.7	310.0	288.3	−109.9	19.1	−102.3	82.3	−30.6	126.9	−112.3	−206.2	−159.1	16.8	59.6	60.9	−280.8	−276.6	−294.8	−181.6r	135.6r	222.3
(16) Consumption of Refined (page 10)	2,033.0	2,376.3	1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,203.5	1,542.3	1,997.5	2,193.2	2,421.7	2,386.0	2,058.8	2,237.1	1,834.4	1,996.8r	2,249.8	2,114.0

Sources: U.S. Department of the Interior, Bureau of Mines;
U.S. Department of Commerce, Bureau of the Census.

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Table 1, Item 1.

Mine production of recoverable copper in the United States

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Arizona	703.4	739.6	501.7	628.0	801.4	917.9	820.2	908.6	927.3	858.8	813.2	1,024.4	923.8	982.6	1,046.1	848.9	1,147.3	848.3	747.6	822.8r	882.4
Michigan	71.7	73.4	58.5	74.8	75.2	67.5	56.0	67.3	72.2	67.0	73.7	43.7	42.4	38.4	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Missouri	2.3	3.9	3.2	5.5	12.7	12.1	8.4	11.5	10.3	12.7	14.3	11.1	11.7	11.9	14.4	15.0	9.3	8.8	8.5	(b)	(b)
Montana	115.5	128.1	65.5	69.5	103.3	120.4	88.6	123.1	132.5	131.1	88.0	91.1	86.2	74.2	77.0	41.6	68.9	71.6	36.8	24.1r	16.7
Nevada	71.3	78.7	50.8	77.2	104.9	106.7	96.9	101.1	93.7	84.1	81.2	58.2	67.1	22.5	(b)	(b)	(b)	(b)	(b)	(b)	(b)
New Mexico	98.7	108.6	75.0	90.8	120.0	166.3	157.4	168.0	204.7	196.6	146.3	172.4	164.7	140.9	181.1	164.7	169.9	(b)	(b)	(b)	(b)
Tennessee	14.8	15.4	14.6	14.2	15.4	15.5	13.9	11.3	8.5	6.3	10.0	11.1	6.2	12.4	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Utah	259.1	265.4	168.6	228.2	296.7	295.7	263.5	259.5	256.6	230.6	177.2	185.5	194.1	205.4	212.8	173.9	232.9	208.4	187.1	(b)	(b)
Other States[a]	14.9	16.1	16.2	16.4	15.0	17.6	17.3	14.4	12.1	9.8	9.5	8.1	7.8	8.2	63.2	57.8	67.2	127.2	164.3	356.0r	304.8
TOTAL	**1,351.7**	**1,429.2**	**954.1**	**1,204.6**	**1,544.6**	**1,719.7**	**1,522.2**	**1,664.8**	**1,717.9**	**1,597.0**	**1,413.4**	**1,605.6**	**1,504.0**	**1,496.5**	**1,594.6**	**1,301.9**	**1,695.5**	**1,264.3**	**1,144.3**	**1,202.9r**	**1,203.9**

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Includes California, Colorado, Idaho, Maine, Oregon, Pennsylvania & Washington.
(b) - Included In Other States.

Mine production of recoverable copper in the World

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Australia	101.2	122.7	101.2	120.8	144.2	173.9	195.4	204.8	242.8	277.0	241.4	240.9	244.3	244.8	261.9	268.4	255.0	270.4	288.3r	260.2r	284.4
Canada	507.8	506.1	613.3	633.3	573.2	672.7	721.5	793.3	908.2	905.4	808.9	805.7	837.1	726.9	701.5	789.7	762.0	675.2	719.8r	795.7r	805.1
Chile	645.2	701.8	727.7	724.1	758.5	762.4	780.8	790.1	810.6	994.4	913.0	1,108.0	1,162.1	1,140.0	1,171.4	1,177.2	1,191.7	1,369.3	1,385.7	1,422.0	1,495.2
China (including Mongolia)	84.9	93.7	99.2	99.2	93.7	110.2	121.3	126.8	132.3	143.3	154.3	165.3	170.9	180.8r	200.3r	230.4r	266.5r	297.6r	297.6r	339.5r	339.5
Japan	118.1	123.1	129.9	132.2	133.5	131.7	133.4	123.6	100.6	90.5	93.7	89.9	89.7	79.4	65.1	58.0	56.8r	55.9r	50.7	47.7	48.0
Mexico	60.8	62.3	61.7	67.4	73.0	67.2	69.7	86.8	88.7	91.2	86.2	98.1	98.9	96.1	118.1	193.3	254.1	263.6	227.2	208.4r	190.7
Papua New Guinea	—	—	—	—	—	—	—	136.7	201.6	202.9	190.1	194.6	201.0	218.9	188.3	161.8	182.3	187.4	201.9	181.2r	193.0
Peru	198.7	220.5	212.4	234.2	219.1	242.7	228.5	241.5	223.4	233.2	194.0r	207.2r	370.4r	419.9r	446.9r	404.2	361.1	392.8	355.2	401.4r	426.0
Philippines	69.1	81.4	95.0	121.6	144.8	176.7	217.8	235.6	243.8	248.6	248.9	261.9	300.7	290.3	328.8	335.7	336.5	322.0	299.2r	257.3r	262.0
Poland	16.6	17.7	19.1	28.3	53.2	91.4	134.7	148.8	167.6	203.9	253.5	289.9	310.9	343.9	374.8	378.1	324.7	414.5	443.5	475.1r	475.1
Scandinavia	66.6	62.3	64.6	71.7	87.5	84.9	88.6	100.1	124.5	110.7	118.6	129.6	133.0	135.9	127.4	119.7	129.1	134.0	152.7r	153.2r	151.9
South Africa	66.7	137.5	140.5	138.5	140.1	164.5	173.6	178.5	193.8	197.4	197.2	217.0	238.2	230.7	224.0	233.6	232.1	228.3	233.5	233.7r	223.1
United States	1,351.7	1,429.2	954.1	1,204.6	1,544.6	1,719.7	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,594.6	1,301.9	1,695.5	1,264.3	1,144.3	1,202.9r	1,203.9
USSR	623.0r	671.0r	767.0r	791.0r	839.0r	887.0r	949.0r	988.0r	1,017.0r	1,017.0r	1,047.2r	1,080.3r	1,080.3r	1,069.2r	1,069.2r	1,080.3r	1,102.3r	1,113.3r	1,124.4r	1,124.4r	1,140.0
Yugoslavia	69.0	64.5	69.7	77.7	90.1	100.1	104.1	113.6	123.2	123.6	126.7	132.4	128.1	135.9	122.8	128.7	122.4	131.5	142.7	151.7r	145.0
Zaire	318.1	349.3	353.3	359.4	401.4	426.7	448.8	480.3	538.5	550.8	545.4	490.1	530.9	467.2	440.7	506.7	556.4	554.2	553.6	551.9r	559.8
Zambia	766.9	687.2	730.8	755.0	793.1	754.1	718.0	790.5	778.9	769.4	746.2	781.4	723.1	708.8	648.5	656.8	647.5	624.9	598.3	622.6	572.8
Other (30 countries in 1985)	322.5	328.6	331.3	347.4	336.2	359.2	389.7	434.3	517.5	546.9	544.6r	544.3r	535.5r	470.0r	478.8r	469.8r	522.0r	611.1r	679.8r	707.9r	702.3
TOTAL WORLD	**5,386.9r**	**5,658.9r**	**5,470.8r**	**5,906.4r**	**6,425.2r**	**6,925.1r**	**6,997.1r**	**7,638.1r**	**8,130.9r**	**8,303.2r**	**7,923.3r**	**8,442.4r**	**8,659.1r**	**8,455.2r**	**8,563.1r**	**8,494.3r**	**8,998.0r**	**8,910.3r**	**8,898.4r**	**9,136.8r**	**9,217.8**

Sources: United States – U.S. Department of the Interior, Bureau of Mines.
Other Countries – ABMS; Metallgesellschaft; CDA.
p - preliminary r - revised

Table 1, Item 2.

Imports and exports of copper ore in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Imports (Ore, Concentrate, Matte)	37.0	41.9	33.0	27.6	39.1	33.8	31.3	55.0	42.9	56.0	74.0	89.6	58.0	33.2	25.2	16.5	36.0	108.1	102.8	17.1r	7.7
Exports (Ore, Concentrate, Matte)	–10.7	–1.4	–38.7	–65.0	–1.2	–61.5	–8.2	–19.6	–23.5	–19.3	–8.3	–14.8	–15.8	–19.3	–49.1	–117.7	–166.2	–215.2	–47.1	–67.3r	–128.2
Net Imports (Ore, Concentrate, Matte)	**26.3**	**40.5**	**–5.7**	**–37.4**	**37.9**	**–27.7**	**23.1**	**35.4**	**19.4**	**36.7**	**65.7**	**74.8**	**42.2**	**13.9**	**–23.9**	**–101.2**	**–130.2**	**–107.1**	**55.7**	**–50.2r**	**–120.5**

Source: U.S. Department of Commerce, Bureau of the Census.
p - preliminary r - revised

Table 1, Item 7.

Smelter production of copper in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Smelter Production – Domestic Ore[a] (Table 1, Item 5)	1,335.7	1,353.1	841.3	1,234.7	1,547.5	1,605.2	1,470.8	1,649.1	1,705.1	1,532.1	1,374.3	1,461.3	1,394.4	1,399.9	1,447.6	1,096.2	1,427.5	1,036.8	979.0	1,091.0	1,037.9
Smelter Production – Foreign Ore (Table 1, Item 5)	31.2	36.6	21.0	31.8	38.0	36.1	29.2	41.3	38.9	37.8	72.8	73.4	40.8	20.3	24.7	15.3	24.0	38.7	43.7	26.8	2.1
Smelter Production – Scrap (Table 1, Item 6)	93.9	114.6	70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5	67.1	49.7	65.3	136.5r	247.6
TOTAL SMELTER PRODUCTION	**1,460.8**	**1,504.3**	**933.0**	**1,351.3**	**1,662.8**	**1,720.2**	**1,566.3**	**1,759.4**	**1,821.8**	**1,649.4**	**1,496.5**	**1,585.7**	**1,484.6**	**1,480.0**	**1,538.7**	**1,161.0**	**1,518.6**	**1,125.2**	**1,088.0**	**1,254.3r**	**1,287.6**

Source: U.S. Department of the Interior, Bureau of Mines.
p - preliminary r - revised
(a) For 1965 thru 1966, CDA used figures for refined production, rather than smelter production, from domestic ores.

Table 1, Item 8.

Imports and exports of blister copper in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Imports of Blister Copper	332.5	349.9	269.3	270.7	237.9	224.4	156.7	137.4	154.1	207.8	88.9	43.8	44.7	81.4	75.1	51.8	91.3	114.0	87.6	66.3	28.6
Exports of Blister Copper	–4.8	–0.7	–21.0	–15.7	–4.3	–7.8	–28.7	–8.5	–7.5	–2.7	–1.5	–2.7	–16.4	–11.4	–8.2	–4.2	–10.2	–2.2	–8.2	–9.2	–19.8
Net Imports of Blister Copper	**327.7**	**349.2**	**248.3**	**255.0**	**233.6**	**216.6**	**128.0**	**148.9**	**146.6**	**205.1**	**87.4**	**41.1**	**28.3**	**70.0**	**66.9**	**47.6**	**71.1**	**111.8**	**79.4**	**57.1**	**8.8**

Source: U.S. Department of Commerce, Bureau of the Census.
p - preliminary

Table 1, Item 10.

Blister stocks and other

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
End-of-Year Blister Copper Stocks	246.0	270.0	220.0	272.0	291.0	340.0	303.0	282.0	265.0	324.0	312.0	321.0	346.0	290.0	303.1	299.8	305.3	256.8	191.8	255.7	162.0
Net Change[a]	–	24.0	−50.0	52.0	19.0	49.0	−37.0	−21.0	−17.0	59.0	−12.0	9.0	25.0	−56.0	13.1	−3.3	5.5	−48.5	−65.0	63.9	−93.7
Apparent Change[b]	−17.2	27.9	−22.4	84.1	76.3	92.8	36.2	−33.9	22.1	120.3	91.1	36.5	−32.7	−107.1	−131.2	−175.6	−179.4	−165.3	−200.9	−148.1r	−96.7

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Net Change – the year-to year increase (+) or decrease (–) of blister copper stocks as reported.
(b) - Apparent Change – the difference between Lines 9 & 11 in Table 1, required to rationalize the CDA flow sheet. Factors other than changes in stocks are included in the apparent change. The sign of the data (+ or –) is opposite that shown in Table 1.

Table 1, Item 13.

Production of refined copper in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Refined Production - Primary Sources (Table 1, Items 1, 2, 4, 8 & 10)	1,711.8	1,711.0	1,133.0	1,437.4	1,742.8	1,765.1	1,591.8	1,873.2	1,868.5	1,654.7	1,443.4	1,539.3	1,496.2	1,597.3	1,670.4	1,334.7	1,702.0	1,352.6	1,303.0	1,323.0r	1,145.5
Refined Production - Scrap at Smelters (Table 1, Item 6)	93.9	114.6	70.7	84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5	67.1	49.7	65.3	136.5r	247.6
Refined Production - Scrap at Refiners (Table 1, Item 12)	336.1	357.7	322.9	316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	362.3	441.2	474.3	419.4	452.7	374.9	204.3r	152.7
TOTAL REFINED PRODUCTION	2,140.8	2,183.3	1,526.6	1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,019.4	2,178.0	1,858.5	2,188.5	1,855.0	1,743.2	1,663.8r	1,545.8

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of the Census; ABMS.
p - preliminary r - revised

Table 1, Item 14.

Imports and exports of refined copper in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Imports of Refined Copper	137.4	162.6	330.3	400.3	131.2	132.1	164.0	192.4	199.9	303.9	146.0	380.7	390.8	455.8	237.2	505.0	391.2	313.9	532.4	555.9	415.7
Exports of Refined Copper	−330.9	−279.6	−161.6	−251.0	−215.0	−222.0	−187.7	−182.7	−191.1	−126.7	−172.4	−114.6	−63.0	−113.1	−90.1	−23.9	−66.0	−39.7	−97.2	−105.5	−69.8
Net Imports of Refined Copper	**−193.5**	**−117.0**	**168.7**	**149.3**	**−83.8**	**−89.9**	**−23.7**	**9.7**	**8.8**	**177.2**	**−26.4**	**266.1**	**327.8**	**342.7**	**147.1**	**481.1**	**325.2**	**274.2**	**435.2**	**450.4**	**345.9**

Source: U.S. Department of Commerce, Bureau of the Census.
p - preliminary

Table 1, Item 15.

Refined stocks and other

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
End-of-Year Refined Copper Stocks at																					
Refineries	50.4	61.6	41.7	44.9	41.9	142.7	82.7	99.6	43.2	151.6	260.7	272.8	286.7	188.3	78.4	73.4	151.0	210.1	66.1	193.4	150.4
Wire Rod Mills	51.0	80.0	47.0	54.0	63.0	134.0	120.0	75.0	61.0	131.0	140.0	133.0	116.3	69.7	48.7	54.6	120.3	137.8	127.9	142.2	104.7
Brass Mills	55.0	84.0	51.0	57.0	56.0	49.0	50.0	35.0	43.0	42.0	33.0	39.0	34.2	30.7	27.0	24.5	29.2	28.0	28.7	29.8	18.8
Other Processors	5.0	10.0	5.0	4.0	6.0	4.0	6.0	5.4	5.6	6.9	6.1	7.0	7.0	7.5	10.4	11.3	9.4	8.4	9.2	8.9	10.6
Government	897.4	452.4	275.2	261.4	253.4	253.4	251.6	226.6	217.8	35.3	26.2	42.1	22.6	22.5	22.3	22.3	22.3	22.3	22.3	22.3	22.3
Commodity Exchange	10.4	4.1	13.7	11.7	4.0	17.9	20.3	57.8	5.9	43.3	100.0	201.0	184.4	179.6	107.9	179.6	187.6	274.5	409.2	276.3	120.3
End-of-Year Total	**1,071.2**	**692.1**	**433.6**	**433.0**	**424.3**	**601.0**	**530.6**	**499.4**	**376.5**	**410.1**	**566.0**	**694.9**	**651.2**	**498.3**	**294.7**	**365.7**	**519.8**	**681.1**	**663.4**	**672.9**	**427.1**
Net Change[a]	−104.3	−379.1	−258.5	−0.6	−8.7	176.7	−70.4	−31.2	−122.9	33.6	155.9	128.9	−43.7	−152.9	−203.6	71.0	154.1	161.3	−17.7	9.5	−245.8
Apparent Change[b]	−85.7	−310.0	−288.3	109.9	−19.1	102.3	−82.3	30.6	−126.9	112.3	208.2	159.1	−16.8	−59.6	−60.9	280.8	276.6	294.8	181.6r	−135.6r	−222.3

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Net Change – the year-to year increase (+) or decrease (–) of refined copper stocks as reported.
(b) - Apparent Change – the difference between Line 16 and the sum of Lines 13 & 14 in Table 1, required to rationalize the CDA flow sheet. Factors other than changes in stocks are included in the apparent change. The sign of the data (+ or –) is opposite that shown in Table 1.

Table 1, Item 16.

Consumption of refined copper in the United States

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Consumption of Refined Copper by:																					
Wire Rod Mills	1,228.0	1,376.0	1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8	1,597.9	1,359.0	1,399.8r	1,561.2	1,517.5
Brass Mills	766.2	939.7	658.9	653.6	799.1	660.6	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	672.6	564.0	591.1	433.4	551.4	637.3	535.6
Ingot Makers	4.4	17.7	8.6	5.7	6.7	6.8	4.5	6.0	6.1	9.2	4.5	7.5	6.6	8.2	6.9	5.5	6.0	4.8	4.9	5.7	5.1
Foundries	16.0	21.4	22.2	14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	19.9	18.2	17.7	15.1	15.6	17.5	21.4
Powder Plants	9.4	13.1	6.5	7.7	9.8	6.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	11.6	8.3	8.3	7.5	8.5	9.5	11.6
Other Industries[a]	9.0	8.4	13.4	10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.3	24.6	22.0	20.0	16.1	14.6	16.6	18.6	22.8
TOTAL REFINED CONSUMPTION	**2,033.0**	**2,376.3**	**1,983.6**	**1,878.4**	**2,150.2**	**2,050.5**	**2,021.0**	**2,237.6**	**2,448.3**	**2,203.5**	**1,542.3**	**1,997.5**	**2,193.2**	**2,421.7**	**2,386.0**	**2,058.8**	**2,237.1**	**1,834.4**	**1,996.8r**	**2,249.8**	**2,114.0**

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of the Census; ABMS.
p - preliminary r - revised
(a) - Chemical, steel, aluminum and other industries.

Table 2

Supply of secondary copper from receipt to consumption by brass mills, ingot makers, foundries, powder plants and other industries

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
(1) Receipts of Domestic Scrap	1,438.4	1,468.5	1,309.3	1,368.2	1,552.8	1,447.6	1,334.9	1,440.8	1,560.9	1,504.3	1,113.0	1,271.1	1,318.4	1,426.9	1,661.6	1,541.8	1,509.0	1,304.5	1,300.3	1,345.7r	1,482.7
(2) Net Scrap Exports (page 12)[a]	−62.6	−18.1	−45.1	−76.6	−46.9	−79.0	−50.7	−39.2	−81.4	−70.5	−84.3	−54.1	−58.5	−95.9	−100.7	−120.8	−80.0	−81.8	−45.9	−98.8	−193.6
(3) Scrap Stocks (page 12)	−2.0	−5.0	−18.0	32.0	−15.0	−13.0	17.0	7.0	−2.0	−3.0	5.0	−19.0	−10.9	22.7	−10.6	12.1	−10.0	9.2	7.3	9.2	−18.9
(4) Recovery From Copper-Base Scrap (page 13)	1,373.8	1,445.4	1,246.2	1,323.6	1,490.9	1,355.6	1,301.2	1,408.6	1,477.5	1,430.8	1,033.7	1,198.0	1,249.0	1,353.7	1,550.3	1,433.1	1,419.0	1,231.9	1,261.7	1,256.1r	1,270.2
(5) Recovery From Other Scrap (page 13)	16.2	16.9	16.4	16.0	19.0	16.8	17.0	19.7	21.1	21.1	28.1	35.7	37.9	39.8	42.5	38.9	41.6	40.2	42.6	41.7	40.7
(6) Total Scrap Recovery (page 13)	1,390.0	1,462.3	1,262.6	1,339.6	1,509.9	1,372.4	1,318.2	1,428.3	1,498.6	1,451.9	1,061.8	1,233.7	1,286.9	1,393.5	1,592.8	1,472.0	1,460.6	1,272.1	1,304.3	1,297.8r	1,310.9
(7) Smelter Production From Scrap	−93.9	−114.6	−70.7	−84.8	−77.3	−78.9	−66.3	−69.0	−77.8	−79.5	−49.4	−51.0	−49.4	−59.8	−66.4	−49.5	−67.1	−49.7	−65.3	−136.5r	−247.6
(8) Refined Production From Scrap	−335.1	−357.7	−322.9	−316.8	−394.8	−393.7	−304.3	−316.3	−366.3	−404.4	−282.1	−300.2	−303.0	−362.3	−441.2	−474.3	−419.4	−452.7	−374.9	−204.3r	−152.7
(9) Consumption of Scrap (page 13)	961.0	990.0	869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	882.5	934.5	971.4	1,085.2	948.2	974.1	769.7	864.1	957.0	910.6

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of the Census; ABMS.

p - preliminary r - revised

(a) - Negative (−) signs denote net exports.

Table 2, Item 2.

Imports and exports of copper-base scrap in the United States

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Imports of Copper-Base Scrap	16.8	31.7	11.4	12.5	7.7	3.8	13.8	18.8	27.1	41.7	20.2	29.4	28.6	28.8	32.0	32.5	38.8	38.8	60.1	59.6	50.9
Exports of Copper-Base Scrap	−79.4	−49.8	−56.5	−89.1	−54.6	−82.8	−64.5	−58.0	−108.5	−112.2	−104.5	−83.5	−87.1	−124.7	−132.7	−153.3	−118.8	−120.6	−106.0	−158.4	−244.5
Net Exports of Copper-Base Scrap[a]	**−62.6**	**−18.1**	**−45.1**	**−76.6**	**−46.9**	**−79.0**	**−50.7**	**−39.2**	**−81.4**	**−70.5**	**−84.3**	**−54.1**	**−58.5**	**−95.9**	**−100.7**	**−120.8**	**−80.0**	**−81.8**	**−45.9**	**−98.8**	**−193.6**

Sources: U.S. Department of Commerce, Bureau of the Census; ABMS.
p - preliminary
(a) - The negative (−) sign for each year is used to be consistent with the convention used in Tables 1, 2 and 4 — namely that imports are **additions** to the domestic flow, and therefore (+), while exports are **subtractions** from the flow, and therefore (−).

Table 2, Item 3.

Copper-base scrap stocks

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Scrap Copper-Base Stocks at:																					
Brass Mills	39.0	44.0	61.0	39.0	39.0	43.0	37.0	36.0	44.0	45.0	46.0	48.0	54.7	44.4	45.6	44.9	39.7	45.6	39.8	40.3	31.8
Secondary Smelters	21.0	23.0	26.0	22.0	21.0	19.0	24.0	22.0	23.0	24.0	27.0	28.0	33.2	26.0	30.1	30.5	41.7	23.7	18.0	23.5	38.3
Primary Producers	28.0	29.0	22.0	20.0	36.0	49.0	27.0	24.0	19.0	18.0	12.0	25.0	27.7	22.1	27.5	16.6	19.1	23.7	28.2	14.3	25.8
Foundries	11.0	8.0	13.0	10.0	10.0	8.0	14.0	13.0	11.0	13.0	11.0	13.0	11.3	10.8	10.7	9.9	11.1	9.8	9.5	8.5	9.4
Other Processors	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0	2.9	2.9	2.8	3.1	2.7	2.7	2.4	2.6
End-of-Year Total	**104.0**	**109.0**	**127.0**	**95.0**	**110.0**	**123.0**	**106.0**	**99.0**	**101.0**	**104.0**	**99.0**	**118.0**	**128.9**	**106.2**	**116.8**	**104.7**	**114.7**	**105.5**	**98.2**	**89.0**	**107.9**
Net Change[a]	2.0	5.0	18.0	−32.0	15.0	13.0	−17.0	−7.0	2.0	3.0	−5.0	19.0	10.9	−22.7	10.6	−12.1	10.0	−9.2	−7.3	−9.2	18.9

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary
(a) - Net Change — the year-to-year increase (+) or decrease (−) of stocks as reported. The sign of the data (+ or −) is opposite that shown in Table 2.

Table 2, Item 6.

Recovery of copper from scrap

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Copper Recovered From Copper-Base Scrap																					
New Scrap	765.9	818.3	673.7	719.9	804.9	734.2	752.5	854.4	901.9	864.2	593.6	716.1	731.2	790.4	947.0	828.6	833.6	680.3	707.3	729.3r	736.4
Old Scrap	607.9	627.1	572.5	603.7	686.0	621.4	548.7	554.2	575.6	566.6	440.1	481.9	517.8	563.3	603.3	604.5	585.4	551.6	554.4	526.8r	533.8
Total (Table 2, Item 4)	**1,373.8**	**1,445.4**	**1,246.2**	**1,323.6**	**1,490.9**	**1,355.6**	**1,301.2**	**1,408.6**	**1,477.5**	**1,430.8**	**1,033.7**	**1,198.0**	**1,249.0**	**1,353.7**	**1,550.3**	**1,433.1**	**1,419.0**	**1,231.9**	**1,261.7**	**1,256.1r**	**1,270.2**
Copper Recovered From Scrap Other Than Copper-Base																					
New Scrap	9.8	10.1	10.2	10.7	12.9	11.5	10.7	13.0	14.3	14.0	17.4	20.7	21.9	22.9	24.5	22.5	24.8	22.4	22.5	23.1	22.3
Old Scrap	6.4	6.8	6.2	5.3	6.1	5.3	6.3	6.7	6.8	7.1	10.7	15.0	16.0	16.9	18.0	16.4	16.8	17.8	20.1	18.6	18.4
Total (Table 2, Item 5)	**16.2**	**16.9**	**16.4**	**16.0**	**19.0**	**16.8**	**17.0**	**19.7**	**21.1**	**21.1**	**28.1**	**35.7**	**37.9**	**39.8**	**42.5**	**38.9**	**41.6**	**40.2**	**42.6**	**41.7**	**40.7**
Copper Recovered From All Scrap																					
New Scrap	775.7	828.4	683.9	730.6	817.8	745.7	763.2	867.4	916.2	878.2	611.0	736.8	753.1	813.3	971.5	851.1	858.4	702.7	729.8	752.4r	758.7
Old Scrap	614.3	633.9	578.7	609.0	692.1	626.7	555.0	560.9	582.4	573.7	450.8	496.9	533.8	580.2	621.3	620.9	602.2	569.4	574.5	545.4r	552.2
Total Copper Recovered (Table 2, Item 6)	**1,390.0**	**1,462.3**	**1,262.6**	**1,339.6**	**1,509.9**	**1,372.4**	**1,318.2**	**1,428.3**	**1,498.6**	**1,451.9**	**1,061.8**	**1,233.7**	**1,286.9**	**1,393.5**	**1,592.8**	**1,472.0**	**1,460.6**	**1,272.1**	**1,304.3**	**1,297.8r**	**1,310.9**

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised

Table 2, Item 9.

Consumption of copper scrap in the United States

COPPER CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Consumption of Copper Scrap by:																					
Brass Mills	465.9	485.7	406.9	475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	531.9	541.7	608.0	532.3	559.3	448.2	540.9	583.8	544.2
Ingot Makers	283.4	293.0	271.9	278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	173.0	195.0	205.5	238.2	214.0	213.0	173.2	176.4	209.1	183.5
Foundries	148.9	144.0	133.6	126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	113.0	87.0	84.7	72.1	74.3	83.4	102.2
Powder Plants	15.9	15.3	16.1	18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.3	18.5	18.1	12.8	12.9	10.1	13.2	14.8	18.1
Other Industries[(a)]	46.9	52.0	40.5	38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.5	107.9	102.1	104.2	66.1	59.3	65.9	62.6
TOTAL COPPER CONSUMED	**961.0**	**990.0**	**869.0**	**938.0**	**1,037.8**	**894.8**	**947.6**	**1,043.0**	**1,054.5**	**968.0**	**730.3**	**882.5**	**934.5**	**971.4**	**1,085.2**	**948.2**	**974.1**	**769.7**	**864.1**	**957.0**	**910.6**

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of the Census; ABMS.
p - preliminary
(a) - Chemical, steel, aluminum and other industries.

Table 3

Consumption of metals by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries

METAL CONTENT, thousands of short tons

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
(1) Consumption of Refined Copper (Table 1, Item 16)	2,033.0	2,376.3	1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,203.5	1,542.3	1,997.5	2,193.2	2,421.7	2,386.0	2,058.8	2,237.1	1,834.4	1,996.8r	2,249.8	2,114.0
(2) Consumption of Copper in Scrap (Table 2, Item 9)	961.0	990.0	869.0	938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	882.5	934.5	971.4	1,085.2	948.2	974.1	769.7	864.1	957.0	910.6
(3) Total Copper Consumed (page 15)	2,994.0	3,366.3	2,852.6	2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,171.5	2,272.6	2,880.0	3,127.7	3,393.1	3,471.2	3,007.0	3,211.2	2,604.1	2,860.9r	3,206.8	3,024.6
(4) Consumption of Zinc	292.5	356.0	274.7	327.1	376.3	288.1	316.3	387.0	381.0	347.2	234.7	323.1	328.8	347.8	358.9	298.1	313.7	246.6	302.1r	341.5r	276.6
(5) Consumption of Lead	37.9	39.5	30.9	31.7	33.7	27.4	25.6	26.1	28.8	28.1	19.7	26.0	30.0	30.1	30.8	25.7	26.0	22.4	25.3r	28.5r	23.5
(6) Consumption of Tin	21.3	23.1	19.7	19.3	19.4	15.9	15.2	22.6	16.3	16.2	11.7	14.4	16.7	16.4	16.4	14.2	14.5	11.7	12.4	14.5r	14.0
(7) Consumption of Nickel	13.3	12.6	10.8	6.6	10.1	10.3	11.5	11.2	17.2	12.0	12.0	9.7	8.1	7.4	11.2	10.6	14.3	5.8	8.9	9.2r	6.3
(8) Total Alloying Metal Consumed (page 16)	365.0	431.2	336.1	384.7	439.5	341.7	368.6	446.9	443.3	403.5	278.1	373.2	383.6	401.7	417.3	348.6	358.5	286.5	348.7r	393.7r	320.4
(9) Total Metal Consumed	3,359.0	3,797.5	3,188.7	3,201.1	3,627.5	3,287.0	3,337.2	3,727.5	3,946.1	3,575.0	2,550.7	3,253.2	3,511.3	3,794.8	3,888.5	3,355.6	3,579.7	2,890.6	3,209.6r	3,600.5r	3,345.0
(10) Ingot Consumed (page 17)[a]	331.2	342.0	323.9	326.5	336.6	256.8	276.4	301.3	300.0	284.7	194.3	236.5	258.2	256.6	266.2	235.6	239.6	191.8	197.5r	207.5r	217.2
(11) Ingot Stocks & Other (page 17)[a,b]	−34.7	−55.1	−31.6	−37.8	−43.6	−55.9	−56.6	−32.1	−10.9	−7.2	−24.7	−7.2	−14.2	−21.4	−44.0	−41.2	−43.0	−41.1	−46.1r	−81.0r	−34.9
(12) Net Metal Consumed (page 17)	3,324.3	3,742.4	3,157.1	3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,528.0	3,246.0	3,497.1	3,773.4	3,844.5	3,314.4	3,536.7	2,849.5	3,163.5r	3,519.5r	3,310.1
(13) Wire Rod Mills - Net Metal Consumed (page 17)	1,228.0	1,376.0	1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8	1,597.9	1,359.0	1,399.8r	1,561.2	1,517.5
(14) Wire Rod & Wire Mills - Metal Stocks & Oth	−139.5	−129.0	−96.0	−79.5	−33.0	−127.2	−80.9	−176.3	−213.3	−151.8	−29.8	−165.0	−85.2	−175.2	−116.0	−65.3r	−173.4r	−61.0r	−100.8r	−125.2r	−100.0
(15) Wire Mills - Metal Contained in Products Supplied (Table 4, Item 10)	1,088.5	1,247.0	1,178.0	1,106.5	1,262.0	1,211.5	1,244.0	1,350.0	1,459.0	1,322.5	1,031.5	1,199.0	1,426.0	1,497.5	1,537.0	1,377.5r	1,424.5r	1,298.0r	1,299.0r	1,436.0r	1,417.5
(16) Brass Mills - Net Metal Consumed (page 17)	1,502.2	1,753.9	1,312.8	1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,464.6	1,549.6	1,619.3	1,380.6	1,461.1	1,116.4	1,383.3r	1,545.6r	1,335.8
(17) Brass Mills - Metal Stocks & Other	−13.7	−91.4	−14.8	−43.2	−102.3	−118.4	−196.5	−111.4	−63.7	−167.1	−36.2	−113.3r	−91.6r	−95.1r	−97.3r	−114.1r	−143.1r	−96.9r	−189.8r	−172.1r	−124.3
(18) Brass Mills - Metal Contained in Products Supplied (Table 4, Item 16)	1,488.5	1,662.5	1,298.0	1,378.0	1,555.0	1,253.0	1,342.0	1,504.0	1,636.5	1,410.5	1,031.0	1,294.0r	1,373.0r	1,454.5r	1,522.0r	1,266.5r	1,318.0r	1,019.5r	1,193.5r	1,373.5r	1,211.5
(19) Foundries - Net Metal Consumed (page 17)	476.9	470.3	419.4	422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	353.5	297.5	292.4	235.7	243.9r	260.6r	296.8
(20) Foundries - Metal Stocks & Other	−28.9r	−5.3r	−8.4r	−17.6r	−28.6r	13.0r	1.9r	−2.0r	5.1r	−14.3r	14.5r	3.6r	−5.2r	−15.2r	9.5r	−12.5r	−9.4r	−13.7r	−16.4r	−2.1r	−56.8
(21) Foundries - Metal Contained in Products Supplied (Table 4, Item 17)	448.0r	465.0r	411.0r	405.0r	439.5r	391.0r	366.5r	392.0r	410.0r	366.0r	290.5r	303.0r	321.0r	331.0r	363.0r	285.0r	283.0r	222.0r	227.5r	258.5r	240.0
(22) Powder Plants - Net Metal Consumed (page 17)	34.2	38.7	34.1	37.1	38.0	29.7	32.3	34.6	41.3	36.6	21.8	34.4	36.5	37.4	36.6	26.0	26.1	21.7	26.8	30.0	36.6
(23) Powder Plants - Metal Stocks & Other	−3.2	−5.2	−6.1	−6.1	−7.5	−6.2	−6.3	−7.6	−9.3	−2.1	1.2	−1.9	−4.5	−9.4	−9.6	−7.0	−4.1	−4.7	−7.3	−8.5	−18.1
(24) Powder Plants - Metal Contained in Products Supplied (Table 4, Item 18)	31.0	33.5	28.0	31.0	30.5	23.5	26.0	27.0	32.0	34.5	23.0	32.5	32.0	28.0	27.0	19.0	22.0	17.0	19.5	21.5	18.5
(25) Other Industries - Net Metal Consumed (page 17)[c]	83.0	103.5	116.8	96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.5	182.1	167.5	159.2	116.7	109.7	122.1	123.4

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.

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(a) - Ingot makers consume refined copper, scrap copper and alloying metal, and ship to foundries, brass mills, powder plants and other industries.

(b) - The difference between the copper and alloying metal consumed by ingot makers and the ingot consumed by the customers of the ingot makers. This difference consists of melting and other losses in producing ingot, stock changes, and other factors.

(c) - Chemical, steel, aluminum and other industries.

Table 3, Item 3.

Consumption of copper by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries

	COPPER CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Consumption of Copper by:																					
Wire Rod Mills – Refined	1,228.0	1,376.0	1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8	1,597.9	1,359.0	1,399.8r	1,561.2	1,517.5
Brass Mills[a]																					
Refined	766.2	939.7	658.9	653.6	799.1	660.6	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	672.6	564.0	591.1	433.4	551.4	637.3	535.6
Scrap	465.9	485.7	406.9	475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	531.9	541.7	608.0	532.3	559.3	448.2	540.9	593.8	544.2
Total	1,232.1	1,425.4	1,065.8	1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,160.5	1,224.3	1,280.6	1,096.3	1,150.4	881.6	1,092.3	1,221.1	1,079.8
Ingot Makers[b]																					
Refined	4.4	17.7	8.6	5.7	6.7	6.8	4.5	6.0	6.1	9.2	4.5	7.5	6.6	8.2	6.9	5.5	6.0	4.8	4.9	5.7	5.1
Scrap	283.4	293.0	271.9	278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	173.0	195.0	205.5	238.2	214.0	213.0	173.2	176.4	209.1	183.5
Total	287.8	310.7	280.5	284.5	297.0	248.2	262.4	256.5	242.8	224.2	168.5	180.5	201.6	213.7	245.1	219.5	219.0	178.0	181.3	214.8	188.6
Foundries[a]																					
Refined	16.0	21.4	22.2	14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	19.9	18.2	17.7	15.1	15.6	17.5	21.4
Scrap	148.9	144.0	133.6	126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	113.0	87.0	84.7	72.1	74.3	83.4	102.2
Total	164.9	165.4	155.8	141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	116.7	123.7	127.3	132.9	105.2	102.4	87.2	89.9	100.9	123.6
Powder Plants[a]																					
Refined	9.4	13.1	6.5	7.7	9.8	5.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	11.6	8.3	8.3	7.5	8.5	9.5	11.6
Scrap	15.9	15.3	16.1	18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.3	18.5	18.1	12.8	12.9	10.1	13.2	14.8	18.1
Total	25.3	28.4	22.6	25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.6	30.0	29.7	21.1	21.2	17.6	21.7	24.3	29.7
Other Industries[a,c]																					
Refined	9.0	8.4	13.4	10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.0	24.6	22.0	20.0	16.1	14.6	16.6	18.6	22.8
Scrap	46.9	52.0	40.5	38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.5	107.9	102.1	104.2	66.1	59.3	65.9	62.6
Total	55.9	60.4	53.9	49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	125.1	129.9	122.1	120.3	80.7	75.9	84.5	85.4
All Industries																					
Refined (Table 1, Item 16)	2,033.0	2,376.3	1,983.6	1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,203.5	1,542.3	1,997.5	2,193.2	2,421.7	2,386.0	2,058.8	2,237.1	1,834.4	1,996.8r	2,249.8	2,114.0
Scrap (Table 2, Item 9)	961.0	990.0	869.0	938.0	1,037.8	894.8	947.5	1,043.0	1,054.5	968.0	730.3	882.5	934.5	971.4	1,085.2	948.2	974.1	769.7	864.1	957.0	910.6
TOTAL COPPER CONSUMED (Table 3, Item 3)	2,994.0	3,366.3	2,852.6	2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,171.5	2,272.6	2,880.0	3,127.7	3,393.1	3,471.2	3,007.0	3,211.2	2,604.1	2,860.9r	3,206.8	3,024.6

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Direct consumption only: not including consumption of copper in ingots from ingot makers.
(b) - Ingot makers consume refined copper, scrap copper and alloying metal, and ship to foundries, brass mills, powder plants and other industries.
(c) - Chemical, steel, aluminum and other industries.

Table 3, Item 8.

Consumption of alloying metal by brass mills, ingot makers, foundries and powder plants

	ALLOYING METAL CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Consumption of Alloying Metal by:																					
Brass Mills[a]																					
Zinc-Slab	114.4	169.3	116.9	145.9	158.7	112.2	134.6	177.4	183.6	167.6	104.8	153.1	154.5	162.2	167.0	138.0	147.9	111.7	130.6	151.5	119.8
Zinc in Scrap	126.4	129.9	108.9	126.7	156.6	128.8	129.8	156.2	149.2	132.6	94.7	124.5	125.5	139.8	147.3	122.1	122.3	98.9	128.0	138.6r	109.6
Lead-Refined	3.5	3.9	2.3	2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9	2.7	2.8	1.6	3.2	2.6	1.3
Lead in Scrap	5.2	5.3	2.9	3.6	4.7	3.2	2.9	3.6	3.6	3.3	2.3	3.4	4.5	3.8	4.0	3.3	3.1	2.4	3.4r	3.7r	1.9
Tin-Refined	1.2	1.5	1.2	1.2	1.5	1.2	1.1	1.0	1.1	1.1	0.6	0.8	0.7	0.8	0.8	0.8	0.8	0.4	0.5	0.6	0.8
Tin in Scrap	0.3	0.4	0.5	0.5	0.7	0.5	0.4	0.5	0.5	0.5	0.3	0.3	0.6	0.5	0.5	0.4	0.3	0.4	0.5	0.5r	0.7
Nickel-Refined	9.3	5.2	3.6	3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6	8.4	11.3	3.5	5.3	5.2	3.5
Nickel in Scrap	3.3	6.4	6.3	2.4	3.3	4.6	4.7	4.1	10.5	4.2	4.1	3.8	3.1	2.2	3.1	1.8	2.6	1.9	3.2	3.5r	2.4
Total	263.6	321.9	242.6	286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	334.2	277.5	291.1	220.8	274.7r	306.2r	240.0
Ingot Makers																					
Zinc-Slab	7.4	9.4	8.1	12.2	13.6	9.9	10.4	7.1	6.9	8.2	6.6	7.7	8.3	7.3	7.5	18.9	22.2	14.6	18.1	21.4	18.2
Zinc in Scrap	33.0	35.2	31.3	32.8	34.5	26.7	31.2	33.9	29.4	28.2	20.8	26.8	29.1	25.0	25.2	9.9	12.2	14.2	17.6	20.8	17.7
Lead in Scrap	21.3	23.6	20.1	19.9	20.1	16.1	16.8	16.2	18.0	18.1	13.4	16.9	19.7	19.2	19.4	17.1	17.5	16.5	16.8	19.9	17.5
Tin in Scrap	15.7	17.2	14.6	14.1	14.1	11.2	11.5	19.1	12.5	12.5	9.3	11.4	13.3	12.4	12.5	11.0	11.3	9.2	9.4	11.1	9.7
Nickel in Scrap	0.7	1.0	0.9	0.8	0.9	0.6	0.7	0.6	1.3	0.7	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4
Total	78.1	86.4	75.0	79.8	83.2	64.5	70.6	76.9	68.1	67.7	50.5	63.2	70.8	64.3	65.1	57.3	63.6	54.9	62.3	73.7	63.5
Foundries[a]																					
Zinc-Slab	3.1	3.4	2.3	2.3	6.0	4.6	4.5	6.8	6.0	4.4	3.1	4.2	4.5	4.9	4.0	3.1	3.2	2.4	2.5	3.0r	3.7
Zinc in Scrap	4.3	4.4	3.4	3.4	3.4	3.2	2.7	2.8	2.7	3.5	3.0	4.1	4.2	5.6	5.2	4.2	4.0	3.2	3.3r	4.0r	4.9
Lead in Scrap	7.9	6.7	5.6	5.4	5.2	5.6	2.8	2.5	2.3	2.6	2.0	2.2	2.5	3.4	3.5	2.6	2.6	1.9	1.9r	2.3r	2.8
Tin in Scrap	2.7	2.4	2.0	1.9	1.8	2.0	1.1	1.0	1.0	1.1	0.9	0.9	1.1	1.6	1.6	1.3	1.4	1.1	1.3	1.5	1.8
Total	18.0	16.9	13.3	13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.3	11.2	11.2	8.6	9.0r	10.8r	13.2
Powder Plants[a]																					
Zinc-Slab	2.0	3.5	3.0	1.6	1.2	1.0	0.7	0.7	1.1	1.3	0.8	1.2	1.6	1.6	1.6	1.1	1.1	0.9	1.1	1.2	1.5
Zinc in Scrap	1.9	0.9	0.8	2.2	2.3	1.7	2.2	2.1	2.1	1.4	0.9	1.5	1.1	1.4	1.1	0.8	0.8	0.7	0.9	1.0	1.2
Tin-Refined	1.4	1.6	1.4	1.6	1.3	1.0	1.1	1.0	1.2	1.0	0.6	1.0	1.0	1.1	1.0	0.7	0.7	0.6	0.7	0.8	1.0
Total	5.3	6.0	5.2	5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.1	3.7	2.6	2.6	2.2	2.7	3.0	3.7
All Industries																					
Zinc-Slab	126.9	185.6	130.3	162.0	179.5	127.7	150.4	192.0	197.6	181.5	115.3	166.2	168.9	176.0	180.1	161.1	174.4	129.6	152.3	177.1r	143.2
Zinc in Scrap	165.6	170.4	144.4	165.1	196.8	160.4	165.9	195.0	183.4	165.7	119.4	156.9	159.9	171.8	178.8	137.0	139.3	117.0	149.8r	164.4r	133.4
Lead-Refined	3.5	3.9	2.3	2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9	2.7	2.8	1.6	3.2	2.6	1.3
Lead in Scrap	34.4	35.6	28.6	28.9	30.0	24.9	22.5	22.3	23.9	24.0	17.7	22.5	26.7	26.4	26.9	23.0	23.2	20.8	22.1r	25.9r	22.2
Tin-Refined	2.6	3.1	2.6	2.8	2.8	2.2	2.2	2.0	2.3	2.1	1.2	1.8	1.7	1.9	1.8	1.5	1.5	1.0	1.2	1.4	1.8
Tin in Scrap	18.7	20.0	17.1	16.5	16.6	13.7	13.0	20.6	14.0	14.1	10.5	12.6	15.0	14.5	14.6	12.7	13.0	10.7	11.2	13.1r	12.2
Nickel-Refined	9.3	5.2	3.6	3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6	8.4	11.3	3.5	5.3	5.2	3.5
Nickel in Scrap	4.0	7.4	7.2	3.2	4.2	5.2	5.4	4.7	11.8	4.9	4.5	4.2	3.5	2.5	3.6	2.2	3.0	2.3	3.6	4.0r	2.8
TOTAL ALLOYING METAL CONSUMED																					
(Table 3, Item 8)	365.0	431.2	336.1	384.7	439.5	341.7	368.6	446.9	443.3	403.5	278.1	373.2	383.6	401.7	417.3	348.6	368.5	286.5	348.7r	393.7r	320.4

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Direct consumption only: not including consumption of alloying metal in ingots from ingot makers.

Table 3, Item 12.

Net consumption of metals by wire rod mills, brass mills, foundries, powder plants, and other industries

	METAL CONTENT, thousands of short tons																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Net Metal Consumed by:																					
Wire Rod Mills - Copper (Table 3, Item 13)	1,228.0	1,376.0	1,274.0	1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8	1,597.9	1,359.0	1,399.8r	1,561.2	1,517.5
Brass Mills																					
Copper	1,232.1	1,425.4	1,065.8	1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,160.5	1,224.3	1,280.6	1,096.3	1,150.4	881.6	1,092.3	1,221.1	1,079.8
Alloy	263.6	321.9	242.6	286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	334.2	277.5	291.1	220.8	274.7r	306.2r	240.0
Ingot	6.5	6.6	4.4	5.2	6.5	6.2	13.2	16.7	14.5	23.9	5.6	8.3	7.3	7.5	4.5	6.8	19.6	14.0	16.3	18.3	16.0
Total (Table 3, Item 16)	1,502.2	1,753.9	1,312.8	1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,464.6	1,549.6	1,619.3	1,380.6	1,461.1	1,116.4	1,383.3r	1,545.6r	1,335.8
Foundries																					
Copper	164.9	165.4	155.8	141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	116.7	123.7	127.3	132.9	105.2	102.4	87.2	89.9	100.9	123.6
Alloy	18.0	16.9	13.3	13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.3	11.2	11.2	8.6	9.0r	10.8r	13.2
Ingot	294.0	288.0	250.3	268.1	280.5	209.2	222.6	241.3	239.6	224.6	154.4	171.3	190.2	203.4	206.3	181.1	178.8	139.9	145.0r	148.9r	160.0
Total (Table 3, Item 19)	476.9	470.3	419.4	422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	353.5	297.5	292.4	235.7	243.9r	260.6r	296.8
Powder Plants																					
Copper	25.3	28.4	22.6	25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.6	30.0	29.7	21.1	21.2	17.6	21.7	24.3	29.7
Alloy	5.3	6.0	5.2	5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.1	3.7	2.6	2.6	2.2	2.7	3.0	3.7
Ingot	3.6	4.3	6.3	5.9	6.9	7.3	4.6	5.3	6.9	3.2	1.1	2.1	3.2	3.3	3.2	2.3	2.3	1.9	2.4	2.7	3.2
Total (Table 3, Item 22)	34.2	38.7	34.1	37.1	38.0	29.7	32.3	34.6	41.3	36.6	21.8	34.4	36.5	37.4	36.6	26.0	26.1	21.7	26.8	30.0	36.6
Other Industries[a]																					
Copper	55.9	60.4	53.9	49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	125.1	129.9	122.1	120.3	80.7	75.9	84.5	85.4
Ingot	27.1	43.1	62.9	47.3	42.7	34.1	36.0	38.0	39.0	33.0	33.2	54.8	57.5	42.4	52.2	45.4	38.9	36.0	33.8	37.6	38.0
Total (Table 3, Item 25)	83.0	103.5	116.8	96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.5	182.1	167.5	159.2	116.7	109.7	122.1	123.4
All Industries																					
Copper	2,706.2	3,055.6	2,572.1	2,531.9	2,891.0	2,697.1	2,706.2	3,024.1	3,260.0	2,947.3	2,104.1	2,699.5	2,926.1	3,179.4	3,226.1	2,787.5	2,992.2	2,426.1	2,679.6r	2,992.0	2,836.0
Alloy	286.9	344.8	261.1	304.9	356.3	277.2	298.0	370.0	375.2	335.8	227.6	310.0	312.8	337.4	352.2	291.3	304.9	231.6	286.4r	320.0r	256.9
Ingot (Table 3, Item 10)[b]	331.2	342.0	323.9	326.5	336.6	256.8	276.4	301.3	300.0	284.7	194.3	236.5	258.2	256.6	266.2	235.6	239.6	191.8	197.5r	207.5r	217.2
NET METAL CONSUMED (Table 3, Item 12)	3,324.3	3,742.4	3,157.1	3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,526.0	3,246.0	3,497.1	3,773.4	3,844.5	3,314.4	3,536.7	2,849.5	3,163.5r	3,519.5r	3,310.1

Sources: U.S. Department of the Interior, Bureau of Mines; ABMS.
p - preliminary r - revised
(a) - Chemical, steel, aluminum and other industries.
(b) - Total consumption of ingot shown here is less than the consumption of metal by ingot makers shown in the details of Table 3, Item 3 and Table 3, Item 8. The difference, shown as Ingot Stocks & Other in Table 3, is primarily melting and other losses in the making of ingot.

Table 4

Supply of wire mill, brass mill, foundry and powder products and their consumption in the end-use markets

	METAL CONTENT, millions of pounds																				
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
(1) Bare Wire	207	269	235	242	245	226	218	270	209	219	167	199	230	236	236	197r	220r	179r	158r	147r	119
(2) Communication Wire and Cable	539	565	543	534	716	735	803	766	873	799	584	687	836	885	971	850	851	751r	683r	720r	667
(3) Building Wire						484	552	580	666	557	483	545	658	718	695	628	660	701r	739r	851r	919
(4) Magnet Wire						466	427	496	537	446	338	451	516	525	531	443	492	396r	444r	509r	473
(5) Power Cable						274	236	262	295	292	216	206	233	237	260	274	270	241r	212r	238r	245
(6) Apparatus Wire and Cordage	1,431	1,660	1,578	1,437	1,563	135	137	169	185	179	140	163	209	209	210	214	197	169r	212r	233r	233
(7) Automotive Wire and Cable (exc. Magnet)						36	46	67	74	64	54	72	90	94	84	58	61	59r	71r	87r	91
(8) Other Insulated Wire and Cable						67	69	90	79	89	81	75	80	89	87	91	98	100r	79	87r	88
(9) Total Insulated Wire and Cable	1,970	2,225	2,121	1,971	2,279	2,197	2,270	2,430	2,709	2,426	1,896	2,199	2,622	2,757	2,838	2,558	2,629	2,417r	2,440r	2,725r	2,716
(10) Total Wire Mill Products[a]	**2,177**	**2,494**	**2,356**	**2,213**	**2,524**	**2,423**	**2,488**	**2,700**	**2,918**	**2,645**	**2,063**	**2,398**	**2,852**	**2,995**	**3,074**	**2,755r**	**2,849r**	**2,596r**	**2,598r**	**2,872r**	**2,835**
(11) Strip, Sheet and Plate	1,021	1,314	1,007	1,033	1,147	883	964	1,075	1,160	1,059	832	965	973	1,027	1,067	873	969	732	803	961r	738
(12) Mechanical Wire	135	140	115	113	130	111	111	128	126	105	65	92	94	104	112	80	82	61	69	73	62
(13) Rod and Bar	828	901	666	787	886	693	744	910	1,005	899	587	826	900	943	962r	810r	814r	620r	770r	876r	788
(14) Plumbing Tube and Pipe	579	473	399	400	433	378	447	463	519	347	310	374	439	459	483	414	401	369	447r	502r	524
(15) Commercial Tube and Pipe	414	497	409	423	514	441	418	432	463	411	268	331r	340r	376r	420r	356r	371r	257r	298r	335r	311
(16) Total Brass Mill Products (page 19)	**2,977**	**3,325**	**2,596**	**2,756**	**3,110**	**2,506**	**2,684**	**3,008**	**3,273**	**2,821**	**2,062**	**2,588r**	**2,746r**	**2,909r**	**3,044r**	**2,533r**	**2,636r**	**2,039r**	**2,387r**	**2,747r**	**2,423**
(17) Total Foundry Products[b]	**896**	**930**	**822**	**810**	**879**	**782**	**733**	**784**	**820**	**732**	**581**	**606**	**642**	**662**	**726**	**570**	**566**	**444**	**455**	**517**	**480**
(18) Total Powder Products	**62**	**67**	**56**	**62**	**61**	**47**	**52**	**54**	**64**	**69**	**46**	**65**	**64**	**56**	**54**	**38**	**44**	**34**	**39**	**43**	**37**
(19) Domestic Products - Total[b]	**6,112**	**6,816**	**5,830**	**5,841**	**6,574**	**5,758**	**5,957**	**6,546**	**7,075**	**6,267**	**4,752**	**5,657**	**6,304**	**6,622**	**6,898**	**5,896**	**6,095**	**5,113**	**5,479**	**6,179**	**5,775**
(20) Net Imports of Mill Products (page 20)	127	232	177	261	129	132	170	213	179	89	55	218	188	276	181	−20	209	180	282	488r	413
(21) Mill Products to Domestic Market*[b]	**6,239**	**7,048**	**6,007**	**6,102**	**6,703**	**5,890**	**6,127**	**6,759**	**7,254**	**6,356**	**4,807**	**5,875**	**6,492**	**6,898**	**7,079**	**5,876**	**6,304**	**5,293**	**5,761**	**6,667**	**6,188**
(22) Building Construction[b]	2,130	2,255	1,881	1,864	2,060	1,854	2,021	2,208	2,377	1,930	1,532	1,870	2,124	2,283	2,311	1,928	2,028	1,841	2,145	2,484	2,484
(23) Electrical and Electronic Products[b]	1,481	1,686	1,443	1,446	1,712	1,602	1,628	1,718	1,845	1,698	1,168	1,473	1,650	1,753	1,867	1,617	1,732	1,455	1,468	1,644	1,454
(24) Industrial Machinery and Equipment[b]	1,152	1,304	1,122	1,128	1,217	1,074	1,027	1,158	1,235	1,106	797	957	1,038	1,127	1,142	991	1,072	832	875	987	885
(25) Transportation Equipment[b]	739	818	673	715	745	613	712	792	905	765	610	846	922	903	879	608	676	522	632	783	701
(26) Consumer and General Products[b]	737	985	888	949	969	747	739	883	892	857	700	729	758	832	880	732	796	643	641	769	664

*Markets include – Building Construction: Plumbing & Heating; Building Wiring; Air Conditioning & Commercial Refrigeration; Builders' Hardware; Architectural.
Electrical & Electronic Products: Telecommunications; Power Utilities; Lighting & Wiring Devices; Business Electronics.
Industrial Machinery & Equipment: In-Plant Equipment; Industrial Valves & Fittings; Heat Exchangers; Off-Highway Vehicles; Non-Electrical Instruments.
Transportation Equipment: Automobile, Truck & Bus; Railroad; Marine; Aircraft & Aerospace.
Consumer & General Products: Appliances; Fasteners & Closures; Military & Commercial Ordnance; Coinage; Consumer Electronics; Utensils & Cutlery; Miscellaneous.

Sources: U.S. Department of Commerce, Bureau of the Census and Bureau of Industrial Economics; Metal Powder Producers Assn. (Line 18–1978 on); CDA.
p - preliminary r - revised
(a) - Copper content.
(b) - All data revised, 1965-1984, due to a restatement of foundry shipments.

Table 4, Item 16.

Supply of brass mill products in the United States

METAL CONTENT, millions of pounds

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Strip, Sheet and Plate																					
Copper	272	354	240	190	238	185	236	239	269	261	212	227	233	234	259	201	227	176	203	254	208
Alloy	749	960	767	843	909	698	728	836	891	798	620	738	740	793	808	672	741	556	600	707r	530
Total	1,021	1,314	1,007	1,033	1,147	883	964	1,075	1,160	1,059	832	965	973	1,027	1,067	873	968	732	803	961r	738
Mechanical Wire																					
Copper	15	15	11	10	15	14	16	20	14	15	7	10	14	20	26	14	16	15	13	12	11
Alloy	120	125	104	103	115	97	95	108	112	90	58	82	80	84	86	66	66	46	56	61	51
Total	135	140	115	113	130	111	111	128	126	105	65	92	94	104	112	80	82	61	69	73	62
Rod and Bar																					
Copper	137	146	119	130	140	115	109	117	135	149	77	100	112	116	117r	111r	112r	83r	82r	93r	95
Alloy	691	755	547	657	740	578	635	793	870	750	510	726	788	827	845	699	702	537	688	783r	693
Total	828	901	666	787	886	693	744	910	1,005	899	587	826	900	943	962r	810r	814r	620r	770r	876r	788
Plumbing Tube and Pipe																					
Copper	548	448	381	385	415	363	431	446	502	335	302	366	432	451	475	407	393	364	441r	496r	519
Alloy	31	25	18	15	18	15	16	17	17	12	8	8	7	8	8	7	8	5	6	6	5
Total	579	473	399	400	433	378	447	463	519	347	310	374	439	459	483	414	401	369	447r	502r	524
Commercial Tube and Pipe																					
Copper	290	362	260	276	363	304	288	305	322	265	171	221r	239r	280r	322r	273r	284r	195r	231r	271r	259
Alloy	124	135	149	147	151	137	130	127	141	146	97	110	101	96	98	83	87	62	67	64	52
Total	414	497	409	423	514	441	418	432	463	411	268	331r	340r	376r	420r	356r	371r	257r	298r	335r	311
All Mill Products																					
Copper	1,262	1,325	1,011	991	1,177	981	1,080	1,127	1,242	1,025	769	924r	1,030r	1,101r	1,199r	1,006r	1,032r	833r	970r	1,126r	1,092
Alloy	1,715	2,000	1,585	1,765	1,933	1,525	1,604	1,881	2,031	1,796	1,293	1,664	1,716	1,808	1,845	1,527	1,604	1,206	1,417	1,621r	1,331
TOTAL BRASS MILL PRODUCTS	2,977	3,325	2,596	2,756	3,110	2,506	2,684	3,008	3,273	2,821	2,062	2,588r	2,746r	2,909r	3,044r	2,533r	2,636r	2,039r	2,387r	2,747r	2,423

Sources- U.S. Department of Commerce, Bureau of Industrial Economics; CDA.

p - preliminary r - revised

Supply of brass mill products in selected countries

METAL CONTENT, millions of pounds

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Benelux	NA	NA	NA	NA	NA	NA	NA	NA	329	304	258	316	335	306	314	299	266	232	209	235r	234
Canada	200	253	228	261	269	231	221	236	281	264	192	223	232	272	264	191	229	155	183	206	195
France	493	492	479	497	597	585	580	598	667	603	476	569	586	590	638	657	615	600	567	613r	561
Germany	922	831	780	968	1,103	1,067	986	1,130	1,311	1,157	932	1,219	1,207	1,219	1,337	1,403	1,277	1,256	1,378r	1,546	1,533
Italy	376	397	437	453	479	527	494	572	626	654	520	647	639	652	650	734	694	668	697	767r	809
Japan	687	730	929	1,030	1,160	1,201	1,152	1,330	1,682	1,298	1,148	1,546	1,573	1,722	1,874	1,912	1,832	1,741	1,909	2,181r	2,095
Scandinavia	286	268	247	272	277	279	260	286	316	316	247	285	295	321	348	340	320	324	346	380	357
Spain	96	98	92	110	138	132	133	167	193	181	133	178	183	174	191	184	148	172	164	166	163
Switzerland	107	109	99	99	110	116	104	100	114	118	81	96	116	105	111	120	106	98	106	121	123
United Kingdom	1,149	1,041	924	1,019	1,035	956	842	905	1,004	903	737	803	827	845	797	644	563	597	565	620	601
United States	2,969	3,325	2,596	2,756	3,110	2,506	2,684	3,008	3,273	2,821	2,062	2,588r	2,746r	2,909r	3,044r	2,533r	2,636r	2,039r	2,387r	2,747r	2,423

Sources: World Bureau of Metal Statistics, U.S. Department of Commerce, Bureau of Industrial Economics; CDA.

p - preliminary r - revised

NA - not available

Table 4, Item 20.

Imports and exports of wire mill, brass mill and powder products

METAL CONTENT, millions of pounds

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985p
Imports of:																					
Wire Rod	10.4	7.8	6.1	13.0	2.4	2.4	3.0	3.0	5.3	2.8	1.5	2.5	13.8	7.0	6.2	5.4	6.0	7.4	8.6	18.1	22.8
Bare Wire (incl. Stranded)	28.0	31.0	24.0	28.0	22.0	35.0	27.0	19.3	26.9	42.9	22.0	39.0	27.5	32.8	30.8	18.9	22.3	26.6	35.0	38.7	42.6
Insulated Wire and Cable								11.5	14.0	12.3	9.2	11.0	11.1	18.2	23.4	21.8	19.2	19.9	29.3	44.7	54.3
Total Wire Mill Products	**38.4**	**38.8**	**30.1**	**41.0**	**24.4**	**37.4**	**30.0**	**33.8**	**46.2**	**58.0**	**32.7**	**52.5**	**52.4**	**58.0**	**60.4**	**46.1**	**47.5**	**53.9**	**72.9**	**101.5**	**119.7**
Copper - Strip, Sheet and Plate	44.6	35.0	41.9	77.5	30.9	26.9	38.7	45.7	48.7	46.9	37.8	59.9	64.7	85.8	80.1	54.1	71.8	59.1	67.6	103.8	82.4
Rod and Bar	2.6	5.2	2.8	8.7	1.4	3.5	4.1	6.1	6.0	6.7	4.2	6.6	8.0	17.5	17.0	12.0	12.4	9.3	9.2	13.1	14.0
Tube and Pipe	19.6	51.1	31.5	48.7	31.4	36.4	43.1	51.6	55.0	31.3	24.3	33.7	39.9	46.3	44.8	22.9	33.8	35.7	55.1	65.8	65.1
Alloy - Strip, Sheet and Plate	30.0	63.8	59.8	64.6	45.5	47.8	74.4	92.4	84.9	57.2	51.4	104.6	105.7	153.7	121.5	81.3	140.7	124.3	158.5	232.0	191.4
Mechanical Wire	1.9	2.3	1.9	2.4	2.0	3.2	4.0	4.3	5.7	4.1	2.6	6.3	7.9	9.9	9.7	7.9	10.4	10.3	11.7	14.8	13.2
Rod and Bar	10.8	44.0	28.0	15.3	12.0	6.9	7.3	12.5	17.9	16.2	11.7	41.7	33.4	51.9	48.3	26.3	121.9	51.4	47.8	83.0	51.0
Tube and Pipe	41.1	46.7	36.3	50.4	44.9	40.3	47.6	53.1	48.2	40.4	32.4	47.3	47.2	69.5	54.4	43.6	51.5	45.5	54.7	71.8	64.0
Total Brass Mill Products	**150.6**	**248.1**	**202.2**	**267.6**	**168.1**	**165.0**	**219.2**	**265.7**	**266.4**	**202.8**	**164.4**	**300.1**	**306.8**	**434.6**	**375.8**	**248.1**	**442.5**	**335.6**	**404.6**	**584.3**	**481.1**
Total Powder Products	**2.6**	**2.9**	**3.0**	**3.5**	**2.8**	**2.3**	**2.4**	**2.7**	**2.3**	**1.7**	**1.6**	**2.6**	**2.4**	**2.5**	**2.3**	**2.0**	**2.7**	**2.3**	**3.1**	**3.3**	**2.5**
TOTAL IMPORTS	**191.6**	**289.8**	**235.3**	**312.1**	**195.3**	**204.7**	**251.6**	**302.2**	**314.9**	**262.5**	**198.7**	**355.2**	**361.6**	**495.1**	**438.5**	**296.2**	**492.7**	**391.8**	**480.6**	**689.1**	**603.3**
Exports of:																					
Wire Rod	8.9	10.1	10.4	5.4	7.2	8.3	14.6	10.9	10.4	14.0	10.9	8.5	11.2	13.0	30.9	53.5	30.7	18.2	12.5	13.2r	5.2
Bare Wire (incl. Stranded)[a]	7.0	6.3	8.8	4.1	8.1	4.2	2.9	5.5	10.4	11.3	7.4	9.6	11.7	18.7	18.8	13.9	15.5	16.7	18.3	19.4	17.6
Insulated Wire and Cable	23.7	22.9	20.3	23.5	26.1	30.3	29.8	35.5	41.1	55.2	69.6	66.8	98.5	121.8	103.0	86.3	112.4	99.3	98.8r	98.5r	93.8
Total Wire Mill Products	**39.6**	**39.3**	**39.5**	**33.0**	**41.4**	**42.8**	**47.3**	**51.9**	**61.9**	**80.5**	**87.9**	**84.9**	**121.4**	**153.5**	**152.7**	**153.7**	**158.6**	**134.2**	**129.6r**	**131.1r**	**116.6**
Copper - Strip, Sheet and Plate	2.3	1.6	1.8	1.7	3.2	3.3	1.5	0.9	1.8	2.2	0.8	1.4	4.2	2.9	3.3	6.7	7.3	4.3	3.1	8.7r	8.1
Rod and Bar	2.7	2.1	0.7	2.2	2.0	3.7	0.9	1.7	4.4	2.7	8.1	1.4	2.6	6.0	12.0	37.0	10.0	13.8	4.0	3.1	2.8
Tube and Pipe	1.8	1.0	1.4	1.2	1.9	2.1	2.5	2.3	15.5	13.5	4.4	5.1	6.2	5.8	18.8	38.9	24.1	10.1	8.0	9.5	10.0
Alloy - Strip, Sheet and Plate	6.9	2.4	2.2	2.5	4.7	4.6	4.2	7.9	12.2	14.5	6.4	8.3	8.6	9.0	10.4	17.3	28.4	10.2	11.6	11.7	15.8
Mechanical Wire	1.6	2.2	1.8	2.2	2.4	4.0	3.5	2.5	3.6	8.4	5.0	4.8	4.2	6.9	5.2	8.0	7.9	12.5	11.6	9.1	10.5
Rod and Bar	4.1	3.5	4.4	3.3	4.2	6.1	12.9	14.3	17.4	30.4	15.5	15.2	15.8	19.3	15.2	20.1	18.6	11.0	15.6	16.3	14.6
Tube and Pipe	3.8	3.9	4.2	3.0	3.5	3.3	5.1	4.1	13.7	16.0	13.2	12.4	7.0	12.0	32.9	31.0	26.6	14.1	13.9	10.0	2.9
Total Brass Mill Products	**23.2**	**16.7**	**16.5**	**16.1**	**21.9**	**27.1**	**30.6**	**33.7**	**68.6**	**87.7**	**53.4**	**48.6**	**48.6**	**61.9**	**100.8**	**159.0**	**122.9**	**76.0**	**67.8**	**68.4r**	**71.7**
Total Powder Products	**1.9**	**2.2**	**2.0**	**2.3**	**3.5**	**3.0**	**3.9**	**3.7**	**5.0**	**5.4**	**2.5**	**3.7**	**3.5**	**3.8**	**3.9**	**3.9**	**2.5**	**2.1**	**1.7**	**1.9**	**2.5**
TOTAL EXPORTS	**64.7**	**58.2**	**58.0**	**51.4**	**66.8**	**72.9**	**81.8**	**89.3**	**135.5**	**173.6**	**143.8**	**137.2**	**173.5**	**219.2**	**257.4**	**316.6**	**284.0**	**212.3**	**199.1r**	**201.4r**	**190.8**
NET IMPORTS (Table 4, Item 24)	**126.9**	**231.6**	**177.3**	**260.7**	**128.5**	**131.8**	**169.8**	**212.9**	**179.4**	**88.9**	**54.9**	**218.0**	**188.1**	**275.9**	**181.1**	**−20.4**	**208.7**	**179.5**	**281.5r**	**487.7r**	**412.5**

Sources: U.S. Department of Commerce, Bureau of the Census; Copper & Brass Fabricators Council, Inc; CDA.

p - preliminary r - revised

(a) - Stranded not included prior to 1972.

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